

PHENIX WEEKLY PLANNING



9/6/2012
Don Lynch

TECHNICAL
SUPPORT
2012

This Week

TECHNICAL
SUPPORT
2012

- Reinstall Station 1 South FEE Plates - Done
- Rewire and re-plumb the MuTr south station 1 - In progress
- Continue Repairs & Upgrades for MuTr Stations 2&3 N&S
- Continue Prep for DC West - in progress
- sPHENIX design support
- MPC-Ex design support

- Complete Repair & Upgrade of station 1S quadrants - Done
- Re-install station 1 S MuTr quadrants - In progress
- Remove MPC South for repairs - Done

Next Week

- Continue Rewire and re-plumb the MuTr south station 1
- Continue Repairs & Upgrades for MuTr Stations 2&3 N&S
- Continue Prep for DC West
- Continue MPC N&S Repairs
- Continue VTX/FVTX Repairs
- sPHENIX design support
- MPC-Ex design support



Repairs and testing
in Progress at Chemistry (VTX)
and Physics (FVTX) Departments

RPC Station 1 North and South Cooling Upgrade

TECHNICAL SUPPORT



North



South



Looking towards RPC3 North
 ← East West →



Looking towards RPC3 South
 ← West East →

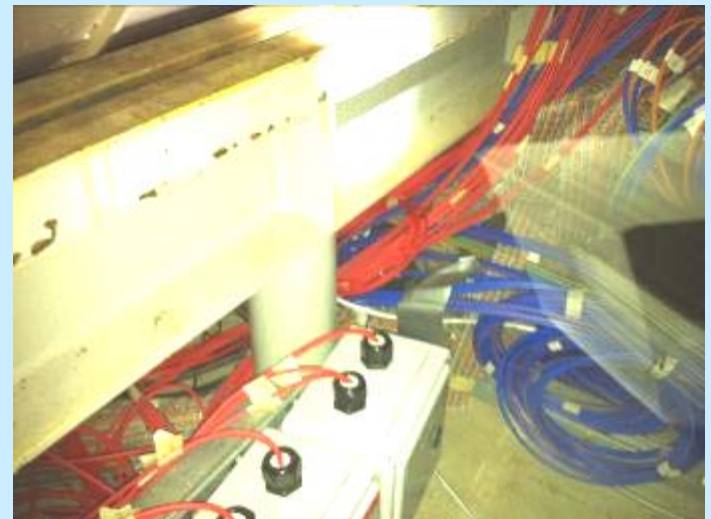
RPC Background Attenuation Project

TECHNICAL SUPPORT ZONE

Under DX at RPC3 North
 ← East West →

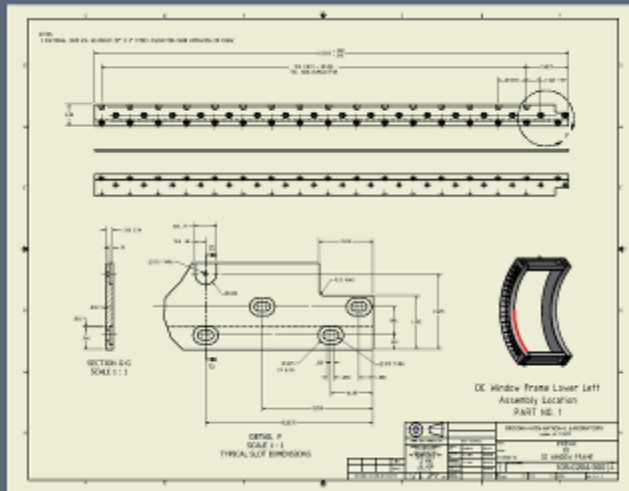


Under DX at RPC3 South
 ← West East →

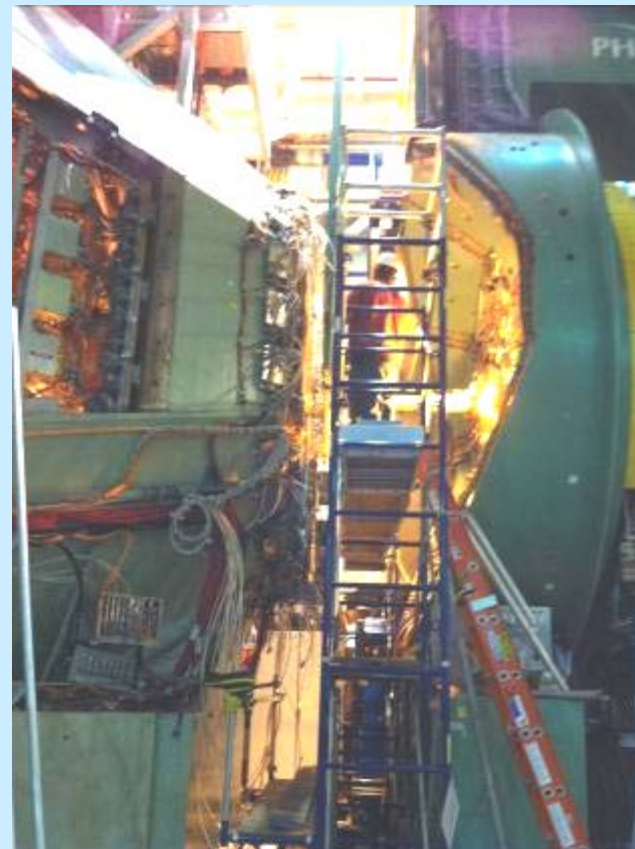
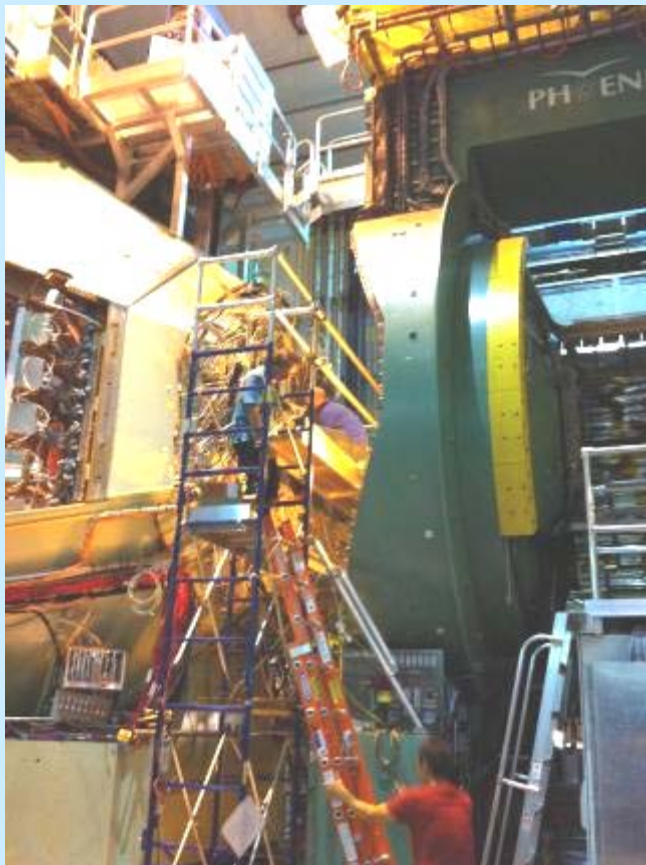


DC West Upgrade Design and measurements

TECHNICAL SUPPORT



- Station-1 South re-capacitation and termination



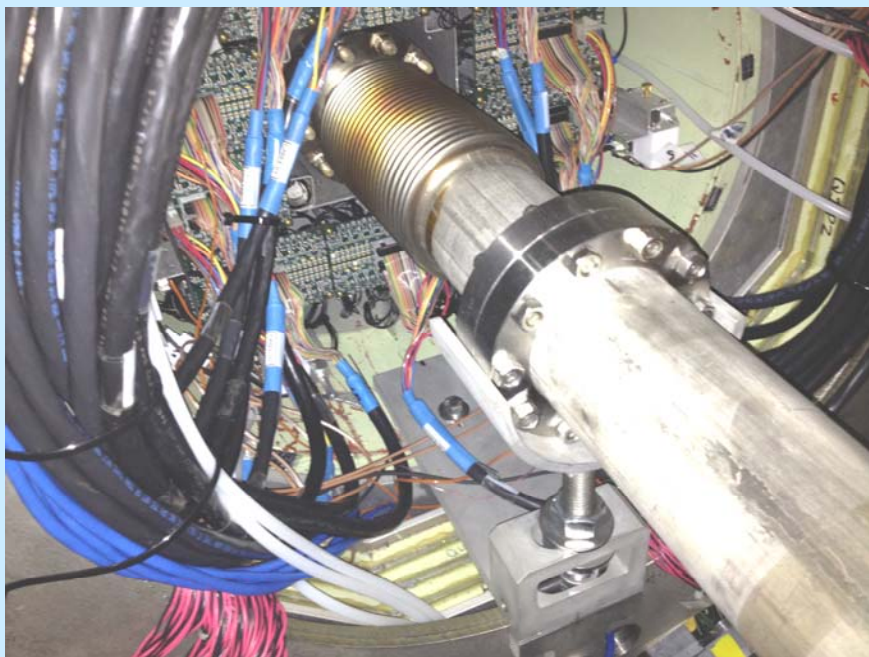
Clamp-on Terminator Installation on North & South Station-3

- Lower clamp-on terminators already installed for both north and south sta-3 (bottom 4 octants)
- With new work platforms that reaches all of sta-3; install remaining (upper) clamp-on terminators.

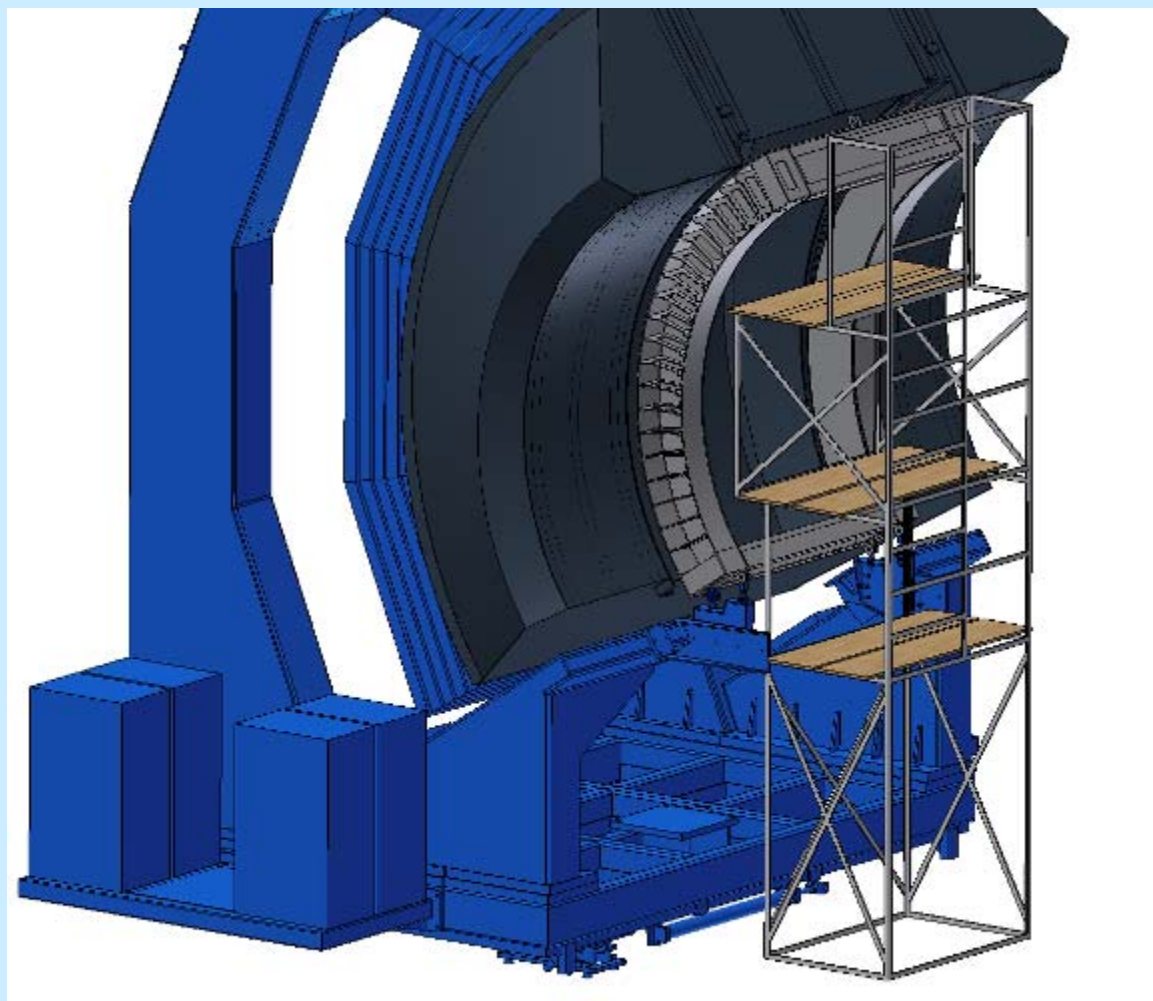


MPC Repairs -

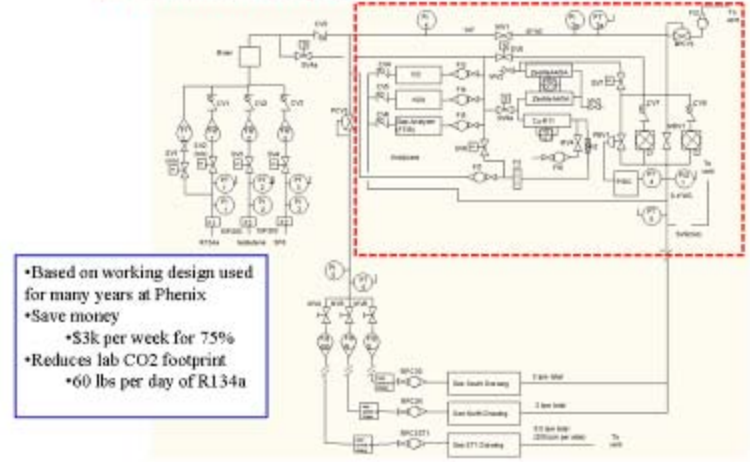
North MPC Removed for Evaluation



DC West Repairs



Run 12 Shutdown Work Overview Gas/Cooling Systems Recirculating Upgrade to RPC Gas System



- Based on working design used for many years at Phenix
- Save money
 - \$3k per week for 75%
- Reduces lab CO2 footprint
 - 60 lbs per day of R134a

June 20, 2012

18

RPC Recirculation Upgrade

VTX/FVTX Cooling Upgrade



MuID Collar IR Holding Area Support



Structural support improvements designed

Parts to be ordered

Installation this fall prior to EC roll in

New Electrical Work for 2012 Shutdown, to be accomplished as time is available

1. Add Transient Surge Suppressor to 3 phase power panel on the Central Magnet Bridge.
2. The Gas Mixing House Breaker Panel for the Gas Mixing side is almost out of spare breaker slots and needs to be reviewed for increased capacity panel to replace it.
3. New computer rack replacements/additions for upcoming Run 13 & Rack Room computer infrastructure changes involving power distribution circuit (UPS and normal AC power) re-work - check with Martin Purschke

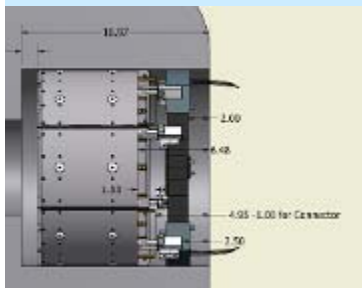
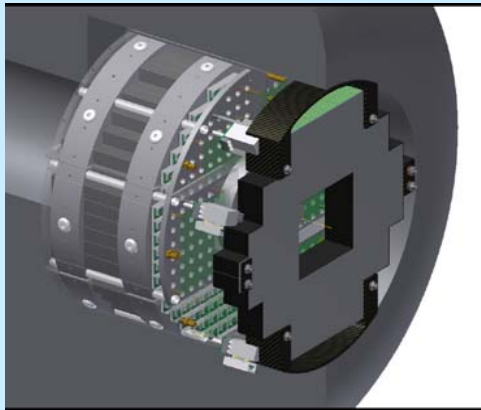
Additional Work for 2012, not yet scheduled, to be fit in as available

1. Replaced aging magnet hoses (CM only)
2. identify obsolete services passing through sill and remove them.
3. Cover for services coming from IR through sill.
4. Plan for stripping out TEC electronics and services to free up TEC racks.
5. Add limit switch and improved spooling control for window washer cable.

PHENIX Shutdown 2012 Electronics Upgrade /Repair

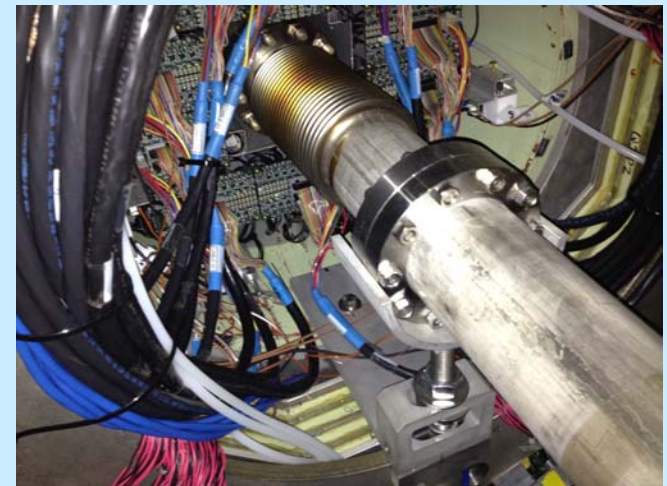
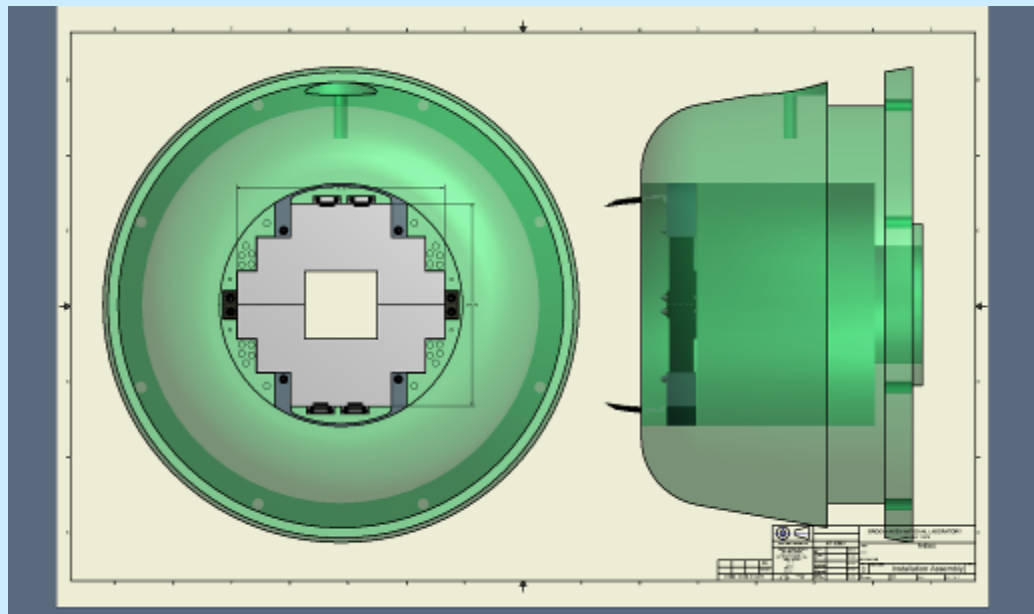
TECHNICAL
SUPPORT
2012

- Replace remaining RS-485 type ADAMs on West carriage with MODBUS/TCP type.
- Install Ethernet switches and MODBUS/TCP ADAMs on Central Magnet arm.
- Install second MODBUS server in counting house.
- Install MTP patch bay and jumpers for FVTX in counting house.
- Add several backup MTP fibers from CH to IR

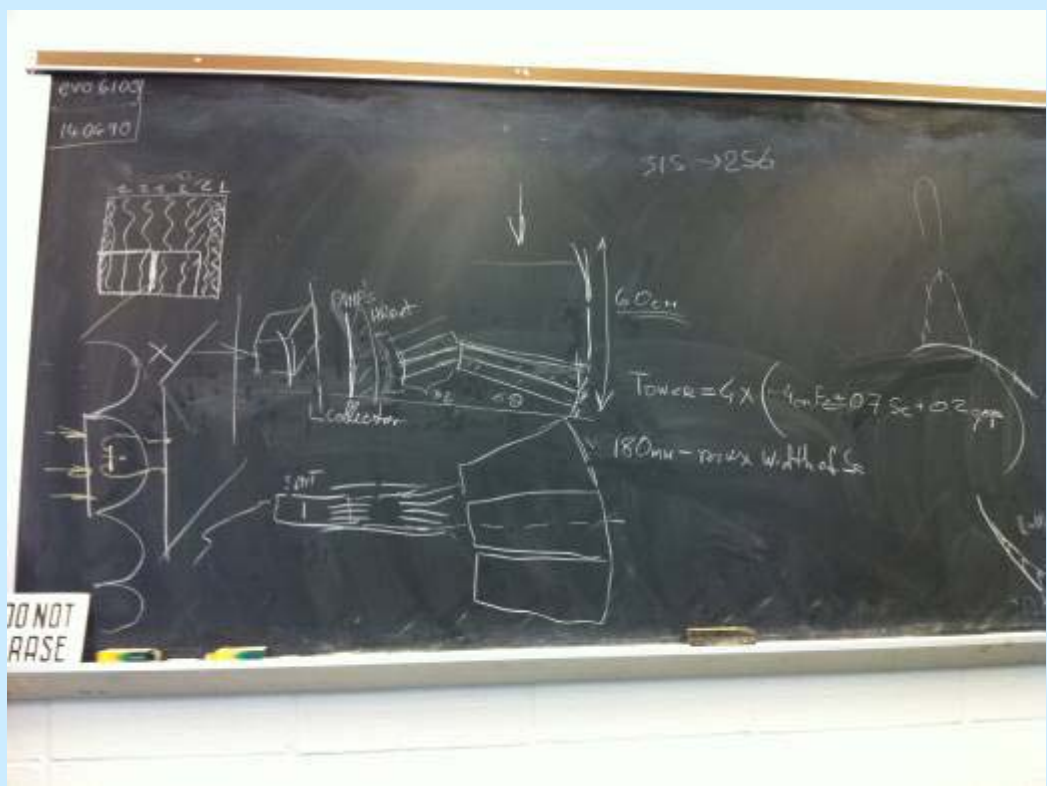


MPC-Ex Upgrade

We will be making measurements and test fitting mockups this summer in preparation for design and fabrication next fall, if proposed upgrade is approved



North MPC 07/25/12



Requested CAD Support for 2012 Shutdown

TECHNICAL SUPPORT 2012

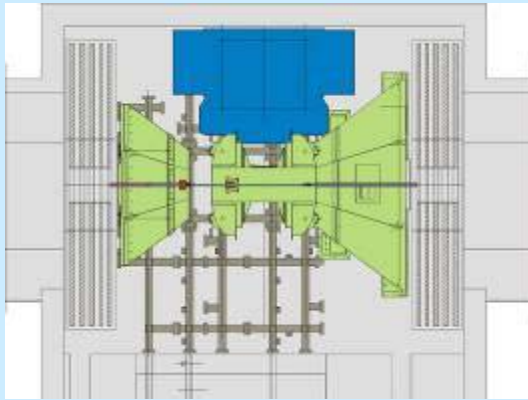
- Carpenter - Assist with Station 1, MMS, MMN and DC West scaffolding and work platforms
- -7/23-Oct. 26 (2 weeks at beginning, 1 week at end, $\frac{1}{2}$ days at various intervals between)
- Articulated manlift - For removal and re-installation of MPC N - week of 10/16
- CAD Mech techs - remove and restore MMS and MMN lampshades - week of 7/23
- Survey - VTX/FVTX at Chemistry and PHENIX IR - 10/8-11/9
- Riggers - transport VTX/FVTX to IR from Chemistry - week of 10/29
- Carpenters and Riggers - erect and disassemble Summer Sunday dance floor - 8/1-8/7
- Riggers and Carpenters - restore dumbwaiter and ladder to EC - week of 11/26
- Riggers - Assemble shield wall and Install plug door - 12/26-12/28
- Blue Sheets and White Sheets - 12/3-12/21
- A/C evaluation and repairs, IR and rack room A/C's - complete by start of run 13

Procedures for Shutdown 2012

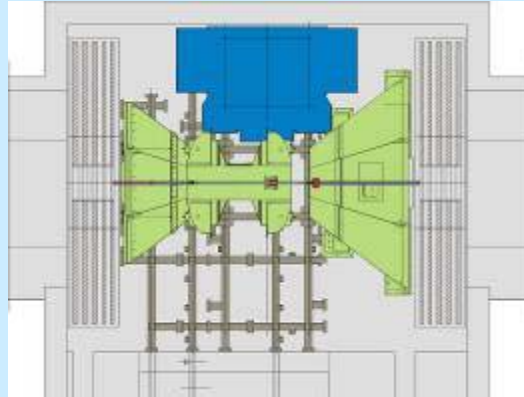
- Existing PHENIX General Purpose Recurring Task procedures - on line
 - VTX Removal - Done
 - FVTX/VTX installation - Done
 - VTX Survey - Done
 - FVTX Survey - Done
 - FVTX Cooling System Upgrades - Done
 - MuTr Maintenance & Upgrade (stations 1 2 & 3) - Done
 - MuTrigger Maintenance and Upgrade - Done
 - DC Repair - Incl. in WP
 - MPC removal and re-installation - incl in WP - Done
- Procedures will be part of 1 WP for VTX and FVTX
- Incl. in separate WP's for MMN and MMS entry

Work Permits for Shutdown 2012

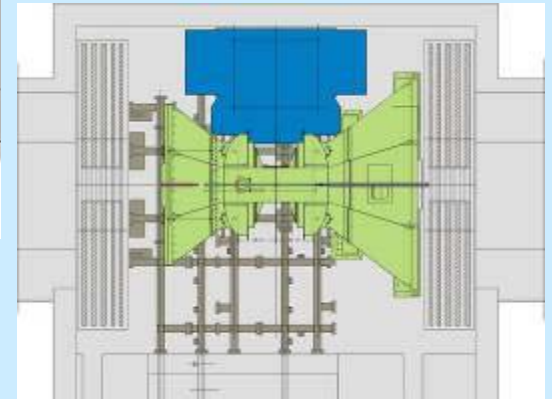
- Start of Shutdown (PHENIX) - Done
- VTX Removal/FVTX/VTX Installation - Approved
- MuTr/MuTrigger Maintenance and Upgrade 3 WP's:
Station 1, MMN and MMS work - at CAD for Approval
- RPC1 Cooling Upgrade (PHENIX) - Done
- DC West Repairs - in Design
- MPC repairs - Approved
- End of Shutdown (PHENIX)



CM is currently moved north to gain access to station 1 south. Work on RPC1 South, DC West, MPC South and MuTr Station 1 South.



After all work finished move CM south, reinstall MPCN complete RPC1 North work, survey step 1 for beampipe,



Move CM north complete beampipe and CM survey. Move MMS North to run position. VTX/FVTX work may be done in any configuration.

TECHNICAL SUPPORT ZONE

Remove MMS & MMN vertical East lampshades	Done *
MuTr South Station 1 work	
Install access (Sta. 1 work platforms)	Done
Disconnect Cables, hoses etc, ID/label all	In Progress
Remove FEE plates and chambers	Done
Station 2 Terminators and manifold upgrade through access opened by station 1 removal	Done
Station 2 South Hall probe repair	Done
MPC South repairs	8/20-9/15/2012
RPC 1 South cooling upgrade	8/20-9/15/2012
Labor Day Holiday	9/3/2012
MuTr South Station 1 work (Cont'd)	
Clean/install new MuTr Sta. 1 chamber parts and upgrades (concurrent At RPC Factory)	Done
Re-install chambers and FEE plates	Done ?
Re-cable, re-hose and test	9/5-9/21/2012
re-capacitation and air manifold upgrades	
Station 3 North and South (upper half)	7/23-9/30/2012

TECHNICAL SUPPORT 2012

Repair upgrade, reassemble VTX/FVTX

In Progress

Test, survey (at Chemistry and IR) and re-install VTX/FVTX

10/5-10/31/12

Substation breaker upgrade/test (CAD)

8/20-9/30

DC West maintenance (replace window)

9/15-10/15

RPC stations 1 and 3, north and south maintenance

As required

Other detector maintenance as required

As required

Infrastructure maintenance as required

As required

TBD prototype tasks

As required

Open Station 1 North, re-install MPC North

10/16-10/26/2012

RPC1 North Cooling upgrade

10/16-10/26/2012

Veterans Day Holiday

11/12/2012

Pre-run commissioning and prep for run 13

11/1-12/31/2012

Prep for EC roll in

11/12-11/16/2012

Roll in EC

11/19-11/23/2012

Thanksgiving Holidays

11/22-23/2012

Prep IR for run

11/26-12/3/2010

Pink/Blue/White sheets

12/3-12/21/201

Christmas Holidays

12/24-25/2012

Start run 13

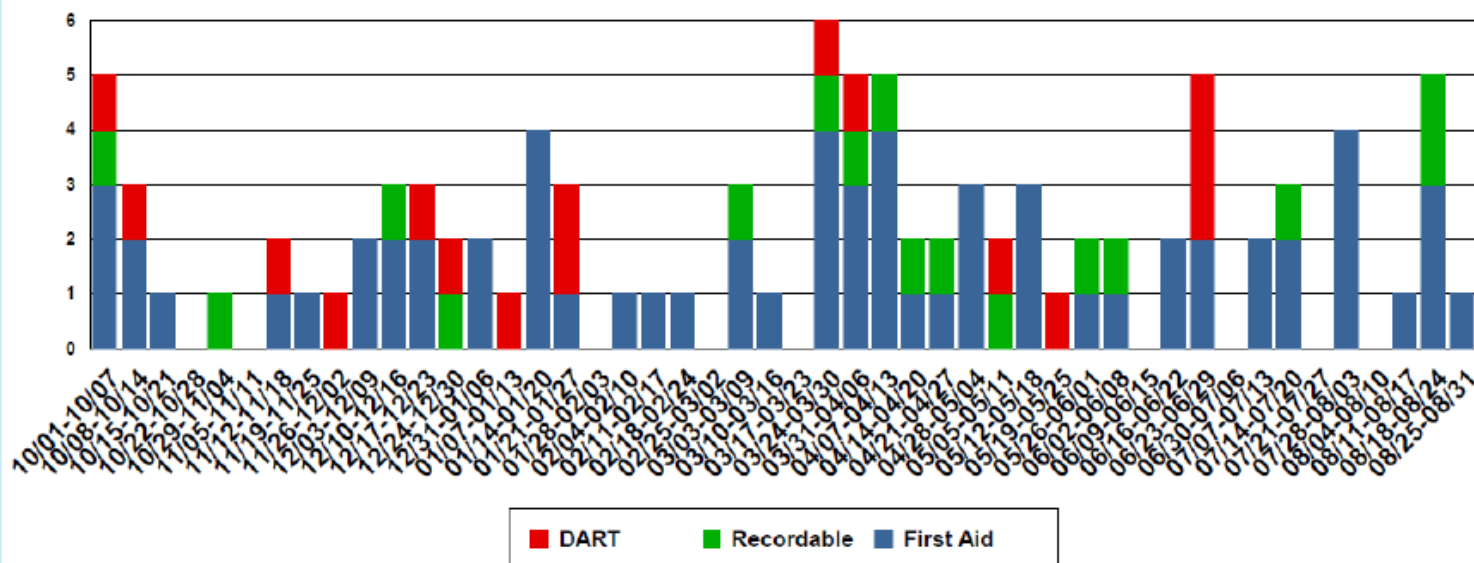
1/1/2013

PHENIX Ladder Update:

- Ladder to Muon ID Steel in Southeast IR: Yellow Tag: requires work permit to access
- Ladder to Muon ID Steel in Northeast IR: Red Tag: work around use yellow tower ships ladders and access from top level.
- Ladder on Southwest and Northwest of MuID steel: Red Tag: do not use, no work around
- Ladder to Eyebrow: Red Tag: work around - use new cross over from bridge; ladder repairs in planning stage
- Ladders to West carriage, North and South: Red Tag: do not use, work around: use portable ladder to access platforms, consult PHENIX work control coordinators first to plan work
- All other fixed vertical ladders at PHENIX: Red Tag: do not use, no work around
- All non-vertical (ships ladders), non-fixed ladders (portable extension, ships (e.g. CM access), A-frame, etc. are permissible to use with appropriate training and planning. Check with work control coordinators for more info.



Injuries Per Week (FY) As of 8/31/2012



Injury Status:

FY12 YTD: DART – 16, TRC – 32, First Aid – 65

FY11: DART – 27, TRC – 42, First Aid – 45

FY10: DART – 19, TRC – 33, First Aid – 52

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNLInjuries.aspx>

Recent Injuries

8/27/12	First Aid	An employee lacerated a finger while repairing a printer in Building 197. At the OMC, first aid was given. (Event Link)
8/24/12	Recordable	A contractor was leaving Building 30 after 9:00 p.m., tripped on an uneven sidewalk and fell to the ground, landing on a piece of broken glass that resulted in a laceration to the base of the right index finger. Sutures were required to close the wound, making this case recordable. (Event Link)
8/23/12	First Aid	A employee was stung by an insect while walking back from lunch outside Building 488. At the OMC, he received first aid and returned to full duty. (Event Link)
8/20/12	First Aid	A non-employee stuck a needle into his own thumb when trying to recap it. At the OMC, first aid was given.

Recent Events		
8/28/12	Non-Reportable	At approximately 11:40 AM on Tuesday, August 28, a Site Resources employee backed a BNL vehicle into a privately owned vehicle (POV) on the east side of the Medical Research Center (Building 490). No one was injured and the damage to the both vehicles was relatively minor (minor damage to bumper on lab vehicle and front fender of POV). (Event Link)
8/28/12	Non-Reportable	A private vehicle spilled a small amount of antifreeze to the parking lot of Building 830. The spill was mitigated by Fire/Rescue and cleaned up by grounds. No other reporting was required. (Event Link)
8/27/12	Non-Reportable	An occupant of Apartment 41S returned to the apartment at approximately 1pm and found a broken window, apparently a result of recent grass cutting in the area. There was no other property damage and no injury. (Event Link)
8/24/12	Non-Reportable	Facility shield drawings for the Accelerator Test Facility, Building 820, have been misplaced. A search for the drawings is in progress. (Event Link)

Where To Find PHENIX Engineering Info

September 6th is Read a book Day and Fight procrastination Day

September is

- Self Improvement Month,
- Be Kind To Editors and Writers Month,
- International Square Dance Month,
- Cable TV Month,
- National Bed Check Month,
- National Chicken Month,
- National Courtesy Month,
- National Honey Month,
- National Mind Mapping Month,
- National Piano Month,
- National Rice Month,
- National Papaya Month,
- Classical Music Month

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

